



INNOVATION 2007 INITIATIVES

Hawai'i's continued prosperity and ability to preserve its quality of life depends on reducing our dependence on land as the chief driver of economic development and meeting the new challenges of the "global economy." Hawai'i's economic development policy should shift toward developing our people and their capacity to innovate.

Innovation is the dynamic process whereby Hawai'i residents create and introduce new ideas and new approaches. It is the process of creating new ideas, then turning them into products or services. Innovation is a process which links together Hawai'i's people, Hawai'i's knowledge, and our many assets to transform ideas, insights and invention into new processes, products and services. Innovation leads to sustainability. We will maintain our standard of living while using fewer natural resources, including land.

The following are **5 key interrelated policy components** of a multi-year effort encompassing a variety of initiatives to transform Hawai'i's economy by developing the innovative capacity of our people:

- Innovation in Education
- Innovation in the Economy
- Innovation in Workforce Development
- Innovation in Linking Hawai'i to the Global Economy
- Innovation in State Government

Innovation in Education

Equip and significantly increase the numbers of Hawai'i secondary school graduates with world-class analytical and problem solving skills developed through science, technology, engineering and math (**STEM**) education, beginning in middle school through college.

Provide incentives for families to make STEM education and career choices; provide opportunities for teachers for additional STEM training.

Significantly increase Hawai'i secondary school graduates with STEM competencies ready to enter the workforce or to go on to post-secondary education.

6 Initiatives

1. **FIRST** ("Fostering Inspiration and Relevance from Science and Technology") Academy: Engage middle school students with math, science, engineering, problem-solving and teamwork concepts in a project-based contextual learning environment, i.e. Robotics.
2. **HiEST** ("Hawai'i Excellence through Science and Technology") Academy: High school standards-based science and technology curriculum taught by community college instructors or teachers certified by the community colleges.
3. Undergraduate tuition **scholarships** at in-state colleges for secondary school students completing the academy program.
4. **Professional Development for Teachers at UH.** Provide practicing elementary, middle and high school teachers of science and mathematics with opportunities to increase their knowledge and understanding of recent developments in science, technology and mathematics.
5. **Tuition Edge Enhancement.** A deduction of \$10,000 on state tax returns for single filers and \$20,000 for dual filers for higher education.
6. Strengthen **higher education institutions** as "drivers" for innovation, including:
 - i) Recruit distinguished faculty through State match of private sector **endowment** of faculty chairs in STEM disciplines at UH.
 - ii) Increasing the number of licensing agreements and **commercialization opportunities** through private industry partnering with the Office of Technology Transfer and Economic Development (OTTED).

Innovation in the Economy

Create the infrastructure and environment in Hawai'i that encourages the creation of ideas and their conversion to products and services that can be sold in global markets.

4 Initiatives:

1. Create a **Hawai'i Innovation Council** to guide and assess public and private sector initiatives and investments.
2. Support a private sector-led life sciences and biotech research facility and **technology incubator in Kaka'ako**.
3. **Invest in Hawai'i's creative industry** by developing:
 - i) A **Digital Media Center** to act as a catalyst, incubator and aggregator for the development of a local film and digital media sector.
 - ii) A **Music Enterprise Learning Experience (MELE)**: Applying the successful "Nashville" model from Belmont University to build the technical and business skills of Hawai'i's artists in the music industry into a global business.
4. \$100 million professionally managed **Hawai'i Innovation Fund** to provide capital for promising emerging companies.

Innovation in Workforce Development

Create life-long learning and skill-building opportunities for incumbent workers.

Institutionalize State's ability to respond to rapidly changing new skill-set needs of employees and employers.

Enhance "brain gain" by effective recruitment of returning kama'aina from around the world.

5 Initiatives:

1. Create employee-centered portable "**Lifetime Learning Accounts**," enabling employees already in the workforce to set aside pre-tax monies, matched by employers, for participation in approved training and education programs.
2. Deploy a **Rapid Response Training program** to enable quick turn-around of training programs tailored to market-driven demand for specialized skill-sets. Examples include advanced avionics technicians (for new submarine to be based at Pearl Harbor), lab technicians (to attract new life sciences companies to Hawai'i), digital media programmers (for emerging special effects firms in Hawai'i).
3. "**Kama'aina Come Home**" state-wide program enabling Hawai'i businesses to track, contact and recruit kama'aina to return to Hawai'i job opportunities.
4. Merge **workforce development programs** with the State's economic development objectives.
5. Significantly expand and standardize **business internship and mentoring programs** for secondary school students in order to prepare them to enter the labor force with work-ready skills.

Innovation in Linking Hawai'i to the Global Economy

Create the infrastructure enabling Hawai'i to seek and play a leading role in the Asia-Pacific region in areas that build on the State's competitive advantages.

6 Initiatives

1. Through the **Office of International Affairs** catalogue all international events, activities and programs in Hawai'i and throughout the Asia-Pacific region which can be easily accessed by all Hawai'i citizens and organizations through an internet portal.
2. Through a newly-established **International Affairs Council** and the State's Office of International Affairs, support and facilitate Hawai'i's existing **Asia-Pacific-related organizations'** efforts to enhance the State's and its residents' global orientation, e.g., Pacific and Asian Affairs Council, Japan-America Society, East-West Center, and Asia-Pacific Center for Strategic Studies, Consular Corps, the military, etc.
3. Position Hawai'i as **the Asia Pacific "gathering place"** where U.S. and Asian private, public and military leaders can meet in a welcoming and multicultural environment to discuss economic, security, natural resource and public health issues critical to the region, e.g., The Asian Pacific Homeland Security Summit & Exposition and the International Women's Leadership Conference.
4. Link Hawai'i to existing and emerging **innovation and creativity centers** around the Pacific Rim, e.g., Silicon Valley or Singapore, San Jose or Shanghai, etc., to increase the exchange of people, products and ideas beneficial to Hawai'i's innovation economy objectives.
5. Expand existing Hawai'i-based **international leadership training and education programs** to include Hawai'i high school and private sector participation.
6. Organize an **"International Education Links"** program that provides every Hawai'i middle and high school **students with the opportunity to study abroad**, targeting Hawai'i's "sister state" relationships.

Innovation in State Government

State Government will lead Innovation by example.

5 Initiatives

1. All State **permitting on line by 2010**, unless prohibited by law.
2. Upgrade State back-office and administrative functions through a **digital (paperless) network**.
3. Create a **Chief Information Technology Officer** position.
4. Expand affordable **wireless broadband service** on all islands and **offer free internet service** in public areas of state buildings, public libraries and schools.
5. Improve the State's ability to **measure the impact of innovation** in our economy.